

since 1884

GET THE EDGE



Table of Contents

Origin of PURE Steel	4-5
Company History	6-7
Product Manufacturing	8-9
Product Selection Charts	10-12
SPECIALTY DISCS	13-24
SoilRazor® VT	14-15
SoilRazor® CT	16-17
SoilWave [™]	18-19
SoilRebel [™]	20-21
RadialRazor™	22-23
ResidueRazor®	24
CONCAVE TILLAGE DISCS	25-37
Plain Concave Discs	26-27
Notched Concave Discs	28-29
Plain Flat Center Discs	
Rollable Boron Concave Discs	32-33
3-Sided Concave Discs	34-35
DuraFace™ Plain & Notched Discs	36-37
COULTERS	39-49
Plain Coulters - Flat & Notched	40-41
8 Wave Coulters	
13 Wave Coulters	44-45
25 Wave Coulters	46-47
Rippled & Bubble Coulters	48-49
DISC WEIGHTS	
PLANTING & SEEDING DISCS	51-55
Assembled Openers	
Plain Openers & Covering Disc Assemblies	54-55
DGECARE™ PLUS DISC SHARPENER	
SOILRIPPER™ TILLAGE POINTS	
HOLE CONFIGURATION OPTIONS	60-63
Vorksheet Pages	64-65

IT'S THE STEEL

Ingersoll reaches deep into the earth to bring you steel products made from the finest PURE ingredients.

Virgin taconite mine



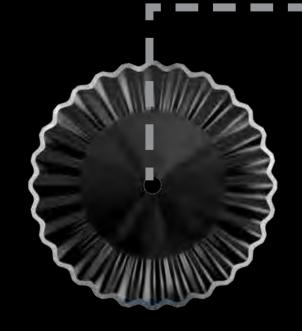




Virgin Iron Ore Taconite







Ingersoll Steel is created with virgin iron ore taconite from North America. This amazingly unique steel is processed with Ingersoll's own proprietary formula to give it the perfect balance of strength and flexibility for long lasting top performance in the field.

There is no other steel like it.

Ingersoll's exclusive steel produces industry leading quality, reliability and performance. It supports the world's tillage equipment with the highest grade components.

Choose Ingersoll for all your high speed, high yield farming solutions.



4



FROM EARLY INNOVATION...

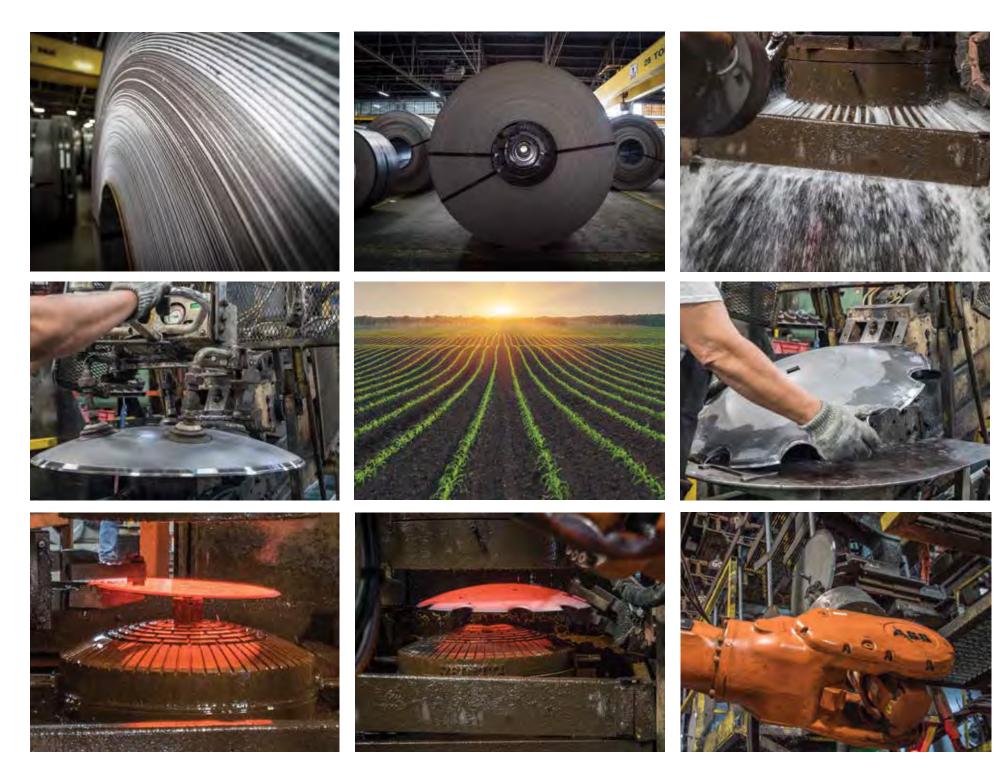
In 1884, Steven Ingersoll took over a small coulter disc manufacturing company in Sandoval, Illinois. The discs produced there were the state of the art, back then, but everything was about to change.

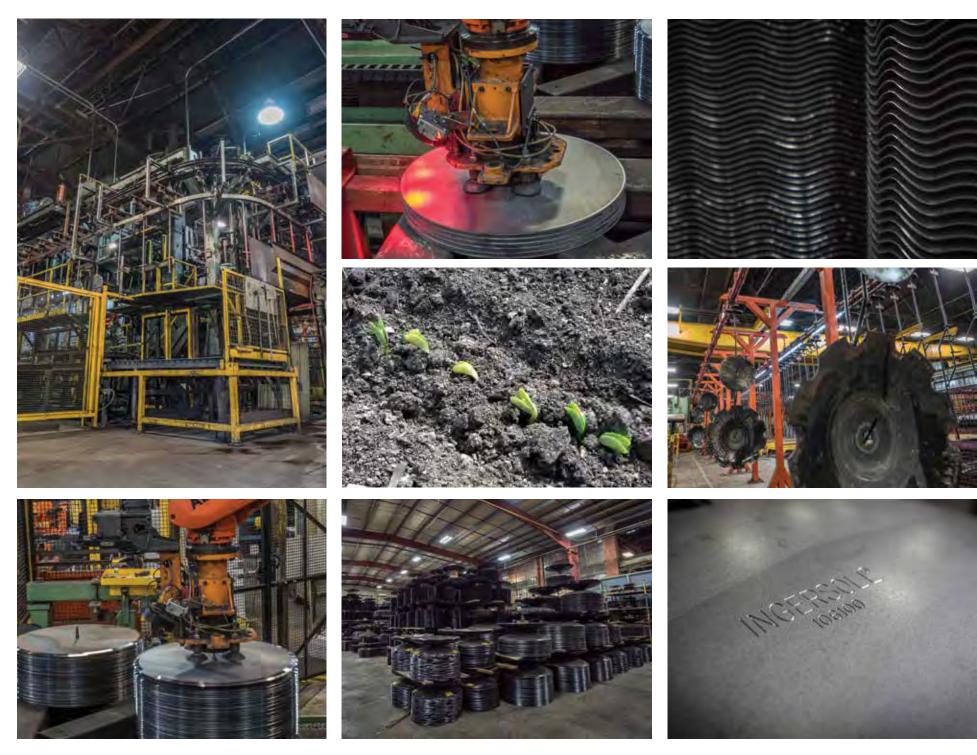
Steven Ingersoll, together with his son Roy, successfully began experimenting with new heat treating processes and innovative manufacturing techniques.

Today, Ingersoll Tillage Group is known throughout the industry as the recognized leader for quality, durability and design of products that fulfill the needs of today's producers. The company's product line has become the top choice of major brand OEMs.









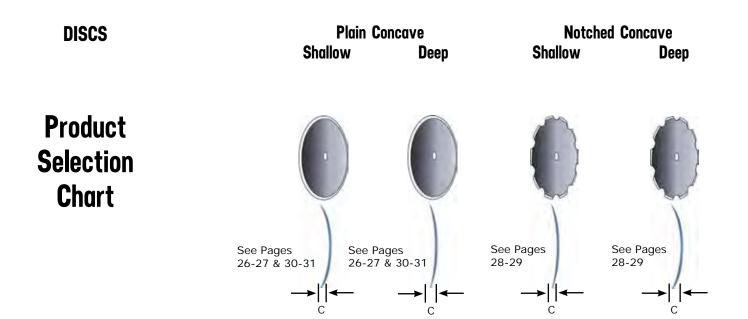


Catalog Guide

The selection chart shown on the following pages is a good place to start. It helps you to choose the disc or coulter that's best suited for your needs.

Then, go to the catalog page indicated to select the specific product based on diameter, thickness, etc.

To help you determine the size and specs, we've provided handy worksheets in the back of this catalog for your use.



INGERSOLL

Factors	Qualities				
Aggressiveness	Low	Х			
99.	Medium			Х	
	High		Χ		X
Tillage Practice	Vertical	Х		Х	
	Conventional	Х	Х	Х	X
Residue	Good		Х		
Management	Better	X			X
	Best			Х	
Seedbed	Good		Χ		
Preparation	Better	X			X
	Best			X	
Speed	Slow				
	Medium		X		X
	High	X		Χ	
Soil Penetration	Low				
	Medium	X		X	
	High		Χ		X

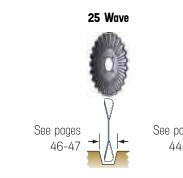
SPECIALTY COULTERS	SoilWave™	SoilRebel™	SoilRazor® VT	SoilRazor® CT	RadialRazor
Product Selection Chart	See Pages 18-19	See Pages 20-21	See Pages 14-15	See Pages 16-17	See Pages 22-23

Factors	Qualities					
Aggressiveness	Low					X
	Medium	Χ	X			
	High			X	Х	
Tillage Practice	Vertical	Χ	X	X		X
	Conventional	Х			X	
Residue Management	Good					
Wallagement	Better		X			
	Best	X		X	Χ	X
Seedbed	Good					
Preparation	Better	Х	X	X	X	
	Best	X				X
Speed	Slow	Х				
	Medium	X	X	X	X	X
	High	Χ	X	X		Х
Soil Penetration	Low			X		
	Medium	Χ	X		Χ	
	High					X



COULTERS

Product Selection Chart



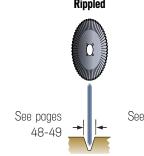














Factors	Qualities						
Aggressiveness	Low					X	X
	Medium	X			X		
	High		Χ	X			
Tillage Practice	No-Till	X	X	X		X	X
	Reduced Till	X	Χ	X	X	X	X
	Conventional	X	Χ	X	X		X
Fertilizer	Good						
	Better	X	Χ	X	X		
	Best					X	X
Residue Management	Good						X
	Better				X	X	
	Best	X	Χ	X			
Soil Conditions	Dry	X	Χ	X	X	X	X
	Damp/Sticky					X	X
	Sandy	X	Χ	X	X	X	X
	Heavy	X	X	X		X	X
Placement	Shallow	X	Х	X	X		
	Deep					Х	X
Soil Tilth	Coarse		Χ	X	X		
Tilth	Medium		X	X	X	X	
	Fine		Χ				
	Extra Fine	X					X
Speed	Slow	X	Х			X	Х
	Medium	X	Χ	X	X	X	Х
	High	X	Χ	X	X	X	X

SPECIALTY DISCS

High performance ground-engaging tools uniquely designed for today's production needs. Available only from Ingersoll!





Vertical Tillage

SOILRAZOR® VT

Extremely sharp edge

Ingersoll has developed the SoilRazor VT vertical tillage disc with a unique serrated edge that maintains its cutting ability as it wears, season after season.

Its wear factor is what makes the SoilRazor VT a breakthrough technology for the vertical tillage industry. The disc's serrated edge remains sharp through use providing a long-lasting cutting edge that maintains its ability to slice and size the toughest residue as it wears. Even at the highest speeds, the SoilRazor VT retains its durability and sharpness.

The SoilRazor VT has set new standards around the world for its innovative design and its exceptional ability to manage residue. These blades are made of Ingersoll's proprietary boron alloy steel for unmatched hardness with flexibility and wear resistance.



Continuous Sawtooth Wave Design

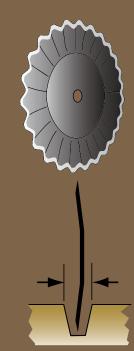
Full Concavity - 330mm no wave area									
Diam	otor	Thickness		Waves	Concovity				
Diaiii	etei	THICKHESS	#	Hei	ght	Concavity			
inches	mm	mm	//	inches	mm	mm			
Deep									
18"	463.5	5	25	0.53	13.5	29.5			
20"	520	5	25	0.53	13.5	40			
22"	576	5	25	0.53	13.5	55			
Shallow									
18"	465	5	25	0.53	13.5	26.5			
20"	517	5/6.5	25	0.53	13.5	34			
22"	569	5/6.5	25	0.53	13.5	43			
24"	621	6.5	28	0.51	13.1	57.7			

Flat Back (FCD:152mm)

		Waves				Caraarritu
Diam	neter	Thickness	Thickness		ght	Concavity
inches	mm	mm	#	inches	mm	mm
Deep						
18	463	5	25	0.53	13.5	26.5
20	513	5/6.5	25	0.53	13.5	36.5
22	563	5	25	0.53	13.5	52
22	563	6.5	28	0.53	13.5	50.3
Shallow						
18	463.5	5	25	0.53	13.5	20.5
20	516	5/6.5	25	0.53	13.5	30.5
22	570	5/6.5	25	0.53	13.5	40
22	570	6.5	28	0.51	13.1	37
24	623	6.5	28	0.51	13.1	53.5

SOILRAZOR® VT

Extremely sharp edge to cut the toughest residue























Conventional Tillage

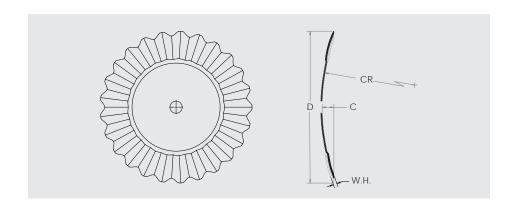
SOILRAZOR® CT

Extremely aggressive edge

The SoilRazor CT full concavity disc from Ingersoll is one of the most innovative products in the market. The unique saw-tooth design is extremely well-suited for cutting through the toughest of residue and penetrating deep into the soil.

The SoilRazor CT has excellent clod-crushing capabilities at normal working speeds and yields superior performance in soft soils. What's more, the cutting edge is maintained through use. So you can continue to work with it for season after season, even in the toughest of conditions.



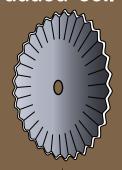


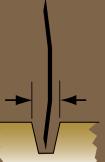
Continuous Sawtooth Full Concavity Design

Diame	eter	Thickness	Waves			Concovity
inches	mm	mm	nm #	Hei	ght	Concavity
ITICHES	mm	111111		inches	mm	mm
20	508	4/5	32	0.43	11	44
22.25	560	4/5	32	0.43	11	55
24	610	5/6	32	0.47	12	65
26.25	666	5/6/8	32	0.49	12.5	82
28.50	724	6/8	32	0.53	13.5	100
30	762	8/9/12.5	32	0.61	15.5	100
32	813	8/9/12.5	32	0.61	15.5	115

SOILRAZOR® CT

Extremely aggressive edge to cut the toughest residue
with added soil coverage







EDGE DETAIL [Type 25]















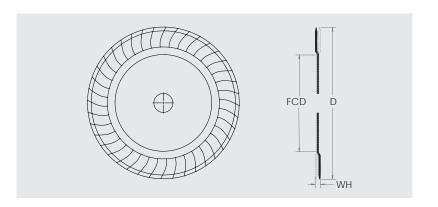
Vertical or Conventional Tillage

SOILWAVE™

Flat Coulter with Curved Wave Design

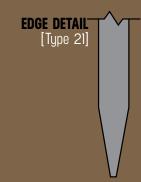
The Soilwave's curved waves work the soil without turning it over, while it cuts residue and incorporates it into the soil. This leaves an ideal mix of organic residue on the surface. Under the surface the soil is a well-prepared seedbed ready for planting.





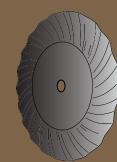
Flat Coulter with Curved Wave Design 20 waves. Height 5/8" - 15.9 mm.

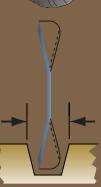
Diam	eter	Thickness F		CD
inches	mm	mm	inches	mm
16	398	4.5/5	10	254
17	428	5	10	254
18	458	5	10	254
20	517	5/6.5	12	305
22	562	6.5	12	305
22	573	5/6.5	12	305



Effective in both vertical

and conventional tillage





















INGERSOLL

Vertical Tillage

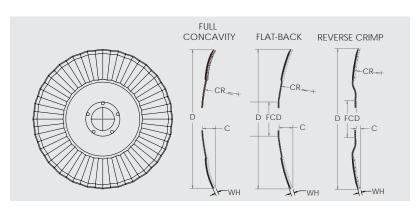
SOILREBEL™

Sizes and mixes residue with soil

The SoilRebel 25 wave concave coulter is designed for high speed operations while it produces less soil smearing and reduced compaction.

It is ideal for high speed vertical tillage.

This blade's aggressive wave profile is well designed for sizing and mixing residue with soil.





Diam	otor	Thickness		Waves		Consolvity
Diam	etei 	THICKHESS	#	Hei	ght	Concavity
inches	mm	mm	#	inches	mm	mm
Deep						
18	462	5	25	0.53	13.5	43.5
20	510	5/6.5	25	0.53	13.5	54
22	560	5/6.5	25	0.53	13.5	64
Shallow	/					
18	464	5	25	0.53	13.5	40.5
20	512	5/6.5	25	0.53	13.5	48
22	567	5/6.5	25	0.53	13.5	52

Flat Back (FCD:152mm)

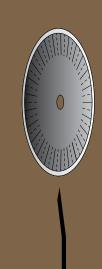
Diam	otor	Thickness		Waves		Concovity
Diam	eter	THICKHESS	#	Hei	ght	Concavity
inches	mm	mm	#	inches	mm	mm
Deep						
18	462	5	25	0.53	13.5	33.5
20	513	5/6.5	25	0.53	13.5	45.8
22	560	5/6.5	25	0.53	13.5	49.3
Shallow						
18	464	5	25	0.53	13.5	27.5
20	517	5/6.5	25	0.53	13.5	37.5
22	567	6.5	25	0.51	13.1	49.5

Reverse Crimp (FCD:165mm)

Diameter Thickness		Waves		Consovity
THICKNESS	-#	Height		Concavity
mm	#	inches	mm	mm
4	25	0.53	13.5	0
5/6	25	0.53	13.5	4.5
5/6/6.5	25	0.51	13.1	13
	4 5/6	mm # 4 25 5/6 25	mm # Hei inches 4 25 0.53 5/6 25 0.53	# Height inches mm 4 25 0.53 13.5 5/6 25 0.53 13.5



Ideal for high speed vertical tillage















No-Till Tillage

RADIALRAZOR™

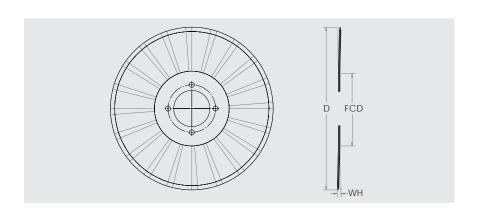
Ideal lead coulter for a no-till planter

Patented edge design features a gradual rise and return of the wave edge pattern that sharply cuts through residue, creating a clean seed slot.

The RadialRazor is ideal as a lead coulter for a planter in a no-till practice. It makes a consistent, narrow planting slot with minimum soil disturbance, forming an optimum seed environment for uniform seed placement.

The RadialRazor is effective in wet or dry soils and requires lower horsepower for vertical penetration.





Ideal Lead Coulter for a No-Till Planter

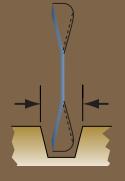
Diam	Diameter		Thickness		Height	FCD		
inches	mm	inches	mm	inches	mm	inches	mm	
14	355	0.157	4	0.31	8	8.27	210	
15	383	0.157	4	0.37	9.5	8.27	210	
16	406	0.157	4	0.37	9.5	8.27	210	
16	406	0.177	4.5	0.37	9.5	8.27	210	
17	433	0.157	4	0.37	9.5	8.27	210	
18	457	0.157	4	0.41	10.5	8.27	210	
18	457	0.197	5	0.41	10.5	8.27	210	
20	514	0.197	5	0.41	10.5	8.27	210	



RADIALRAZOR

Ideal lead coulter for Aggressiveness both planting and fertilizer applications



















Residue management

RESIDUERAZOR® EDGE

A five times sharper edge

Take a close look at the two disc blade edges.
The one on the right side has the unique Ingersoll
ResidueRazor® edge. The one on the left is an ordinary
edge, the kind you'll find on many competitive blades.

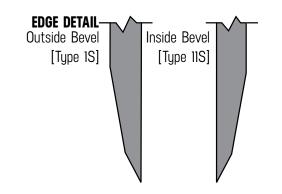
With the ResidueRazor, we use carbide cutters to create an edge that's five times sharper than any ordinary blade.

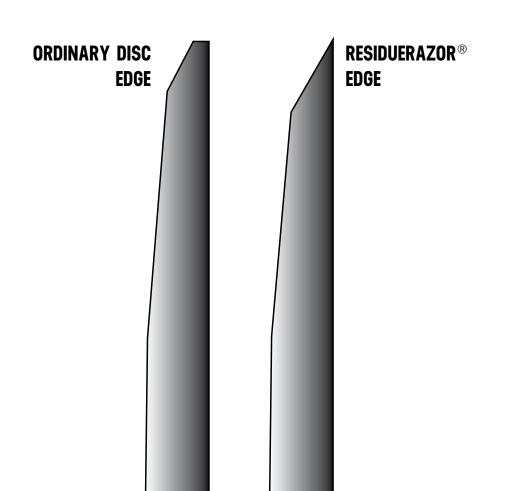
This edge is ideal for genetically engineered corn, soybean, wheat or barley residue.

ResidueRazor blades are made from Ingersoll's own PURE™ professional grade steel – amazingly hard and flexible at the same time, helping make your concave discs perform better.

Residue Razor

Diameter	Thickness
Inches	mm
18	4/4.5/5/6/6.5
20	4/4.5/5/6/6.5
22	4/4.5/5/6/6.5
24	4/4.5/5/6/6.5





CONCAVE TILLAGE DISCS

Ingersoll provides today's producers with a complete line of concave tillage discs. Available only from Ingersoll!



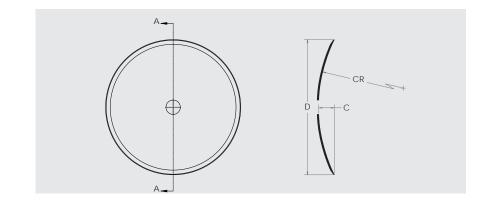


Conventional Tillage

PLAIN CONCAVE DISCS

Achieve high performance with your edge preference

Plain concave discs provide significant soil disturbance for tilling and inverting the soil, plus mixing the residue into the soil. They are maximum soil movers and can be used in all types of soil conditions.



Plain & Notched Concave Disc Dimensions

	Deep I															Shallow
		Concavity Radius (CR)														
	54	10 mm	56	60 mm	62	:0 mm	67	75 mm	710 mm		760 mm		840 mm		920 mm	
	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity	Diam.	Concavity
	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
9"			238	12												
12"			303	20.5												
14"			352	27												
16″			408	37	410	35										
18"			457	48	459	42							461	31	461	26
20″	504	59			508	53					511	41.5	514	38	515	34
22"	557	73			560	65	560	58.5			565	51	565	47	569	42
24"	604	88			611	78	615	69.5	617	66.5	618	63	620	57	625	47
26"	654	108			668	94.5	670	86.5	676.5	81	676	76			678	61
28"	699	127							722	95					734	73
30"									758	104.5			768	89	768	82.5
32"									820	125.5						



As concavity increases, soil

movement increases.

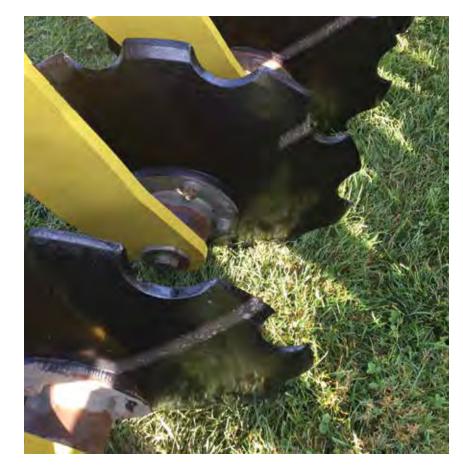


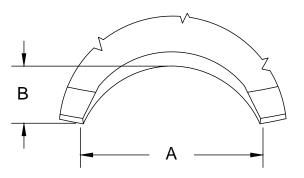
Conventional Tillage

NOTCHED CONCAVE DISCS

Achieve high performance with your edge preference

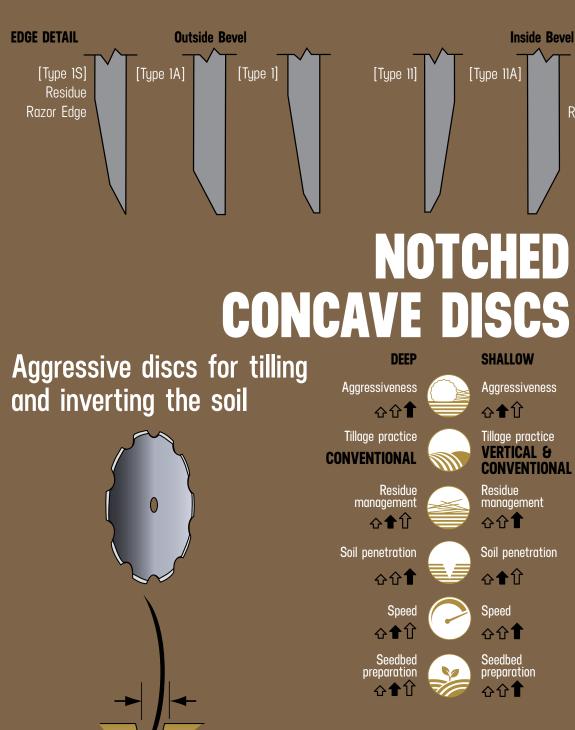
Notched concave discs provide a very aggressive cutting edge that is well-suited for soil penetration (especially when the concavity of the disc is shallow). These discs are also a good choice for residue management.





Notched Concave Discs

Diameter Inches	# Notches	A Inches	A mm	B Inches	B mm
16	8	3.11	79	1.14	29
18	9	3.11	79	1.14	29
20	10	3.11	79	1.14	29
22	10	3.11	79	1.14	29
24	10	3.11	79	1.14	29
26	10	3.54	90	1.57	40
28	10	3.54	90	1.57	40
30	10	3.54	90	1.57	40
32	10	3.54	90	1.57	40



Aggressiveness

Soil penetration



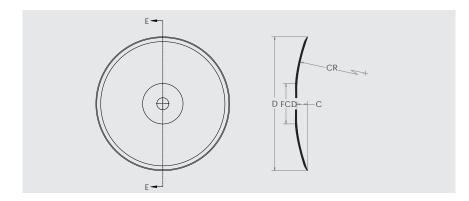
Vertical Tillage

PLAIN FLAT CENTER DISCS

Achieve high performance with your edge preference

Plain coulters are the perfect solution for when you want to cut through residue and penetrate the soil with minimal soil disturbance.

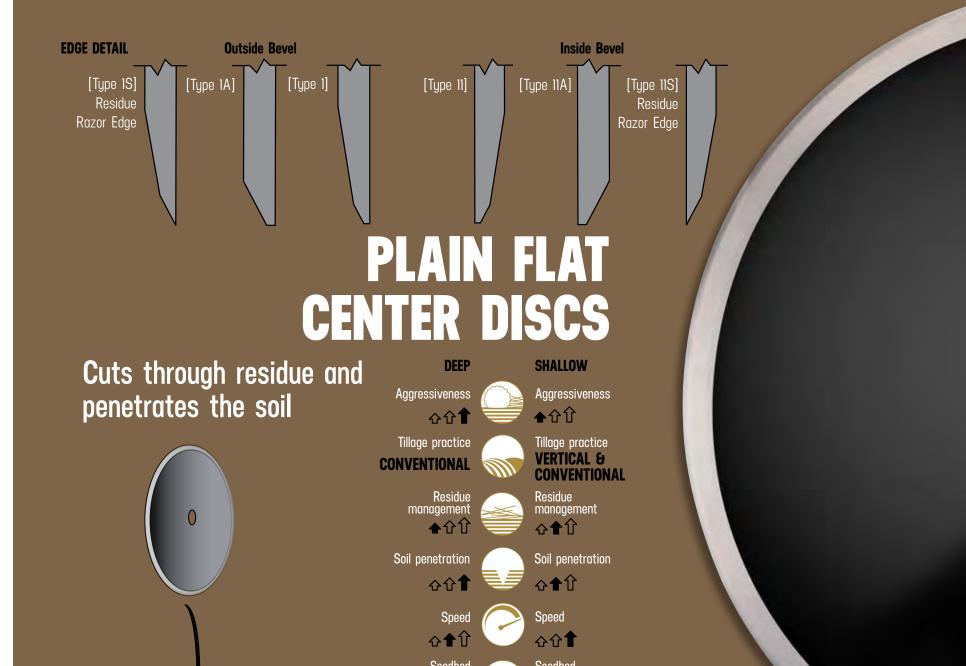




Plain & Notched Flat Center Disc Dimensions

Deep Shallow

								Concav	ity Rad	ius (CR)								
		0 mm 84 mm)		5 mm 20.7 mm)	475 (FCD: 98		560 (FCD: 11)mm 165mm))mm 78mm)	_	mm 20 mm)		mm 85mm)		Omm 185mm)
	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm	Dia mm	Conc mm
8″	201	13.8																
9″			237	12.5	237	12												
12″					302	22							303	13.5				
12.8″			323	29														
13″			335	32			327	19					325	16				
14"			347	34									353	19				
16″							408.5	33.5			410.5	31.75						
18″							457	48	460	36	460	36			463	28.5		
20″									515	40	508.5	45.5			514	36		
22"									567	51					566	45.5		
24"									613	71					614	58	625	46
26"															676	71	681	58.5





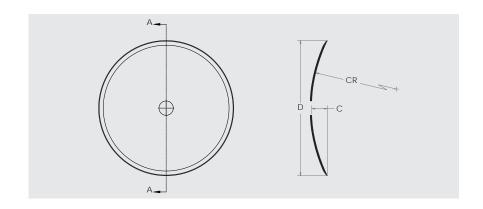
All Tillage Practices

ROLLABLE BORON CONCAVE DISCS

Edges can be renewed by rolling

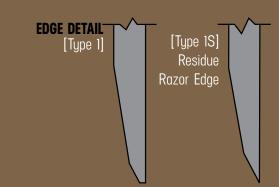
Rollable boron discs enjoy the advanced properties of Ingersoll's exclusive boron alloy, yet the edges of these discs can be renewed by rolling, rather than sharpening. For farmers who use rolling equipment, these discs offer the best of both worlds.





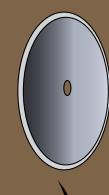
Rollable Boron Disc Blades - Plain

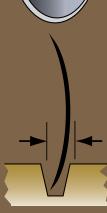
Diameter		Thickness	Conca	vity	Radius	
inches	mm	mm	inches	mm	mm	
18	461	6.5	1.02	26	920	
20	515	6.5	1.33	34	920	
22	560	6.5	2.5	65	620	
22	569	6.5	1.65	42	920	
24	611	6.5	3.1	78	620	
24	618	6.5	2.48	63	760	



ROLLABLE BORON **CONCAVE DISCS**

Edges can be renewed by rolling





















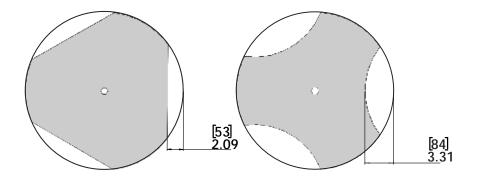
Conventional Tillage

3-SIDED CONCAVE DISCS

Typically used as a leveling disc at the end of a tillage tool

Two different types of notches can be applied. For curved or radiused notches, the maximum depth is 84 mm. In straight edge notches, the maximum depth achieved is 53 mm.





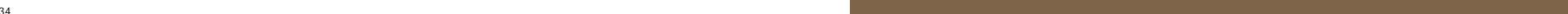
3-Sided Concave Disc Blades

Diameter	Thickness
inches	mm
16	4/4.5
18	3/4/4.5/5/6,5
20	4/5/6.5
22	5.0/6.0/6.5
24	6.0/6.5/8.0

3-sided discs are available in any full concave or flat back dimension.









Conventional Tillage

PLAIN AND NOTCHED DURAFACE DISCS

Special surface coating

The patented DuraFace process is a special surface coating that yields a disc nearly as hard as tungsten carbide but without the brittleness, nearly as corrosion-resistant as stainless steel but without the high price.

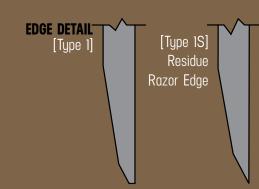




DuraFace[™] Coating

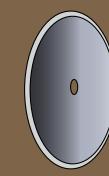
DuraFace coating can be applied to all plain and notched discs, full concave or flat back.

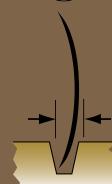
Diameter	Thickness
inches	mm
24	6 / 6.5
26.5	6 / 6.5
28.5	6 / 6.5 / 8
30	8
	•



PLAIN and NOTCHED DURAFACE™ DISCS

Long-lasting use in abrasive soils





Tillage practice

Tillage practice CONVENTIONAL

Soil penetration



COULTERS

Ingersoll provides today's producers with a complete line of coulters. Available only from Ingersoll!



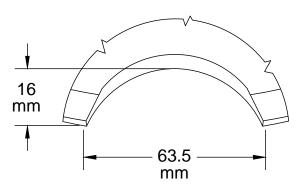


All Tillage Practices

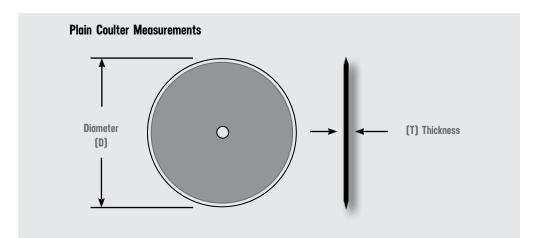
Plain Coulters - Flat & Notched

For all types of soil conditions

Plain coulters are the perfect solution for when you want to cut through residue and penetrate the soil with minimal soil disturbance. Notched coulters are used when a more aggressive disc is needed.

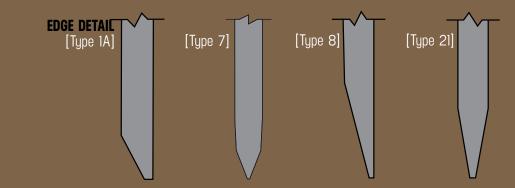






Plain Coulters - Flat & Notched

Diam	neter	Thickness	Typical
inches	mm	mm	# Notches
8	204	2.5	NA
9	239	2.5/3.5	NA
12	306	2.5/3	9/10
13	330	3	10
13.5	344	3.5	10
14	356	2.5/3/3.5/4/5	9/10/13
15	381	3/3.5/4/5	10
15.8	401	3.5/4/4.5	6
16	410	3.5/4/4.5/5/6.5	6/8/10
17	430	4/4.5	13
18	460	4/4.5/5/6.5	9
18	467	3/3.5/4/4.5/5/6/6.5	9
20	520	4.5/5/6/6.5	13
22	576	4.5/5/6.5	10
24	632	4.5/5/6/6.5	10



FLAT and NOTCHED COULTERS

Good cutting performance with minimal soil disturbance































EDGE DETAIL [Type 21]

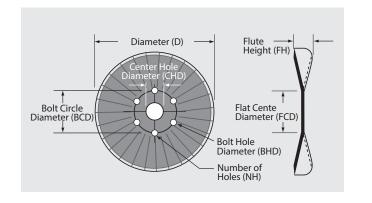
All Tillage Practices

8 WAVE COULTERS

Aggressive soil disturbance

8 wave coulters are designed to cut through residue while providing greater soil disturbance. Ideal for dry, sandy or heavy soils and can be used at medium or high speed.



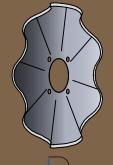


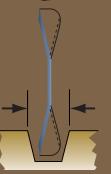
8 Wave Coulters

FCD: 7" (178 mm)									
Diam	eter	Thickness	Flute	Height					
inches	mm	mm	inches	mm					
Shallow	1								
14	364	4/4.5	0.75	19					
15	378	4/4.5	0.81	20.5					
16	401	4/4.5	0.87	22					
17	448	4/4.5	1.02	26					
18	460	4/4.5	1.04	26.5					
22	560	5/6.5	2.28	58					
Deep									
15	373	4.5	1.3	33					
17	439	4/4.5	1.77	45					
18	446	4.5/5	1.81	46					
18	446	4/4.5/5	2.56	65					
20	506	4.5/5/6	2.2	56					
22	555	5/6.5	2.56	65					

8 WAVE COULTERS

Aggressive cutting for residue management and greater soil disturbance

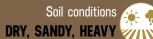






























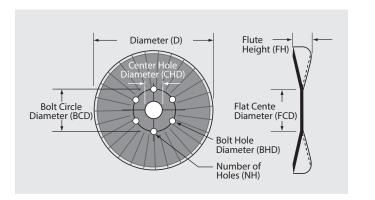
All Tillage Practices

13 WAVE COULTERS

Greater soil disturbance and tilling action

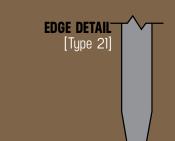
Wavy and fluted coulters are designed to help manage residue by cutting through old crop and opening a strip in the soil. 13 Wave coulters have good tilling action, achieving a fine soil tilth at all speeds, in dry, sandy and heavy soil conditions.





13 Wave Coulters

	FCD: 8" (203 mm)									
Diam	eter	Thickness	Flute Height							
inches	mm	mm	inches	mm						
13	330	3	0.45	11.5						
13.5	344	3.5	0.51	13						
14	364	4.5	0.57	14.5						
15	381	4	0.61	15.5						
16	401	4/4.5	0.67	17						
17	428	4/4.5/5	0.83	21						
17.6	446	4/4.5	0.85	21.5						
18	458	4/4.5/5	0.90	23						
20	516	4/5/6/6.5	1.06	27						
22	571	4.5/5/6.0/6.5	1.22	31						



13 WAVE COULTERS

Second in a series for residue management and soil disturbance













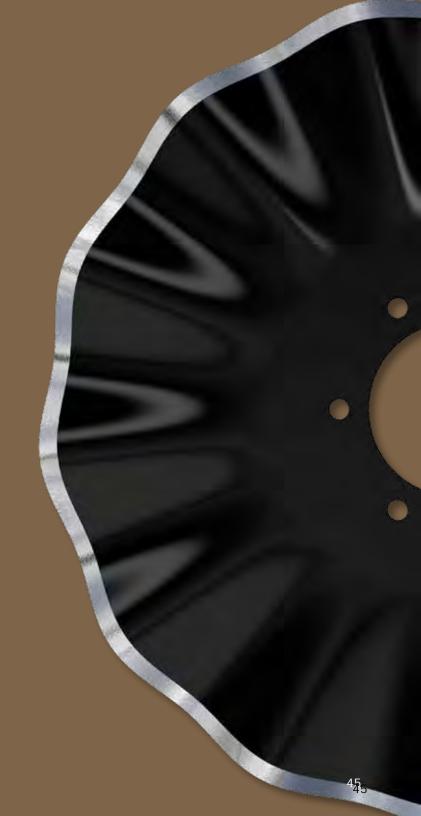














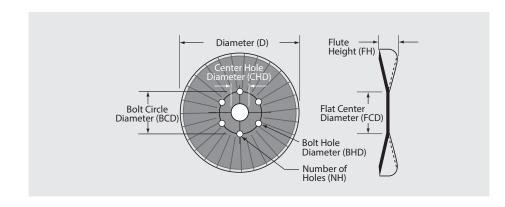
All Tillage Practices

25 WAVE COULTERS

Medium tillage action to achieve extra fine tilth

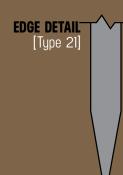
25 Wave coulters have a medium tillage action and are designed to create an extra fine tilth and exceptional seedbed. With moderate cutting and penetration, this coulter is ideal for dry, sandy and heavy soils, and can be used at any speed.





25 Wave Coulters

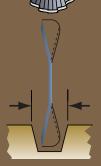
Diameter		Thickness	FCD		Flute	Height
inches	mm	mm	inches	mm	inches	mm
13	328	3	9.4	240	0.55	14.5
14	364	4	9.4	240	0.55	14.5
15	373	4/4.5	9.4	240	0.55	14.5
16	401	4/4.5	11	279	0.63	15
18	446	4/4.5	11.8	298	0.63	15
20	518	4/4.5	11.8	298	0.63	15
22	572	4.5/5.0	11.25	286	0.63	15



25 WAVE COULTERS

Aggressive cutting for residue management with reduced soil disturbance

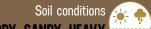












DRY, SANDY, HEAVY













Reduced Tillage

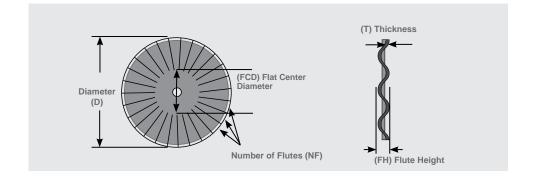
RIPPLED AND BUBBLE COULTERS

Minimum soil disturbance

Rippled coulters offer excellent penetration and cutting with a minimum of soil disturbance. They are good for a wide variety of soil conditions.

Bubble coulters are well-suited for fields with light residue where minimum stirring of the soil is desired.





Rippled Coulters

Diame	eter	Thickness	FCD		Waves	Flute	Height
inches	mm	mm	inches	mm	#	inches	mm
15	381	3.5	12.25	311	50	0.16	4
16	401	4	12.25	311	50	0.16	4
17	430	3.5/4/4.5	12.25	311	50	0.16	4
17.5	447	4.5	12.25	311	50	0.16	4
18	460	4	12.25	311	50	0.16	4
18	454	4.5	14.25	362	60	0.27	7
20	520	4/4.5	14.25	362	60	0.31	8
20	506	4.5	14.25	362	60	0.31	8
22	565	4.5	16.77	426	60	0.31	8
22.5	576	4.5/5	16.69	424	60	0.31	8

36 Bubble Coulters

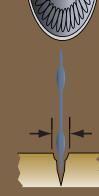
Diame	ter	Thickness	FCE)	Waves	Flute	Height	
inches	mm	mm	inches	mm	#	inches	mm	
15	380	4.5	8.27	210	36	0.787	20	
16	401	4	8.27	210	36	0.787	20	

EDGE DETAIL [Type 21]

RIPPLED and BUBBLE COULTERS

Residue management with a minimum of soil disturbance





RIPPLED





Aggressiveness











Tillage practic NO-TIL & REDUCED TIL

> Residue management











ئ







Disc Weights

[Diameter	Thickness	We	ght	Diameter	Thickness	Wei	ght	Diameter	Thickness	Wei	ght
	inches	mm	lbs	kgs	inches	mm	lbs	kgs	inches	mm	lbs	kgs
	8	2	1.19	0.54	15	5	8.94	4.06	22	7	29.5	13.38
	8	2.5	1.37	0.62	16	3	6.15	2.79	22	8	33.5	15.2
	9	2.5	1.72	0.78	16	3.5	6.95	3.15	24	4.5	22.2	10.07
	9	3	1.98	0.9	16	4	7.85	3.56	24	5	25.9	11.75
	9	3.5	2.64	1.2	16	4.5	8.35	3.79	24	6	28.3	12.84
	10	2.5	2.07	0.94	16	5	10.2	4.63	24	6.5	30.4	13.79
	12	2.5	2.7	1.22	16	6.5	12.75	5.78	24	8	40.5	18.37
	12	3	3.3	1.5	17	3.5	8.3	3.76	26	5	30.6	13.86
	12.5	2.5	3.05	1.38	17	4	9.2	4.17	26	6	35.2	15.97
	12.5	3	3.93	1.78	17	4.5	10.82	4.91	26	6.5	37.6	17.06
	12.75	3	4.14	1.88	17	5	11.07	5.02	26	8	48.6	22.04
	13	2.5	3.42	1.55	18	3	7.8	3.54	28	6	43.2	19.57
	13	3	4.33	1.96	18	3.5	9.61	4.36	28	6.5	46.4	21.05
	13	3.5	4.95	2.25	18	4	10.01	4.54	28	8	54.5	24.72
	13	4.5	5.75	2.61	18	4.5	11.44	5.19	28	9	63.5	28.8
	13.5	2.5	3.84	1.74	18	5	13.3	6.03	28.5	6	45.7	20.74
	13.5	3	4.53	2.05	18	6	14.8	6.71	28.5	6.5	48.3	21.91
	13.5	3.5	5.17	2.35	18	6.5	17.85	8.1	28.5	8	57.6	26.13
	13.5	4	5.9	2.68	20	3.5	12.5	5.67	28.5	9	66.5	30.16
	14	2.5	4.05	1.84	20	4	13.85	6.28	30	6	48.3	21.91
	14	3	5.13	2.33	20	4.5	15.75	7.14	30	8	60.6	27.49
	14	3.5	5.37	2.44	20	5	17.45	7.92	30	9	68.5	31.07
	14	4	5.72	2.59	20	6	20.6	9.34	30	10	75.4	34.2
	14	5	7.25	3.29	20	6.5	22	9.98	32	8	73.6	33.38
	15	3.5	6.75	3.06	22	4.5	19.7	8.94	32	10	90.1	40.88
	15	4	7.65	3.47	22	5	21.4	9.71	32	12	111	50.35
	15	4.5	8.22	3.73	22	6	25.3	11.48	36	12	139	63.05
	,			-	22	6.5	27.5	12.47	36	12.5	141.2	64.07

PLANTING and SEEDING DISCS

Products for ideal seedbed preparation, accurate seed placement and strong emergence.





Planting and Seeding

ASSEMBLED OPENERS

Adapted to your needs

Ingersoll offers the industry's most reliable openers. Made with an exclusive alloy of boron steel, they offer unsurpassed performance in the field.

Ingersoll's assembled openers can be provided with heavy-duty bearings and hubs for no-till planting and seeding applications.



Assembled Openers

InchesmmShaft82032.55/8"Standard bearing	Remarks
8 203 2.5 5/8" Standard bearing	
12 303 2.5 5/8" Cast bearing housing with do	ouble row bearing
12 303 3.0 5/8" Double row waterpump	
12 303 3.0 3/4" Double row waterpump	
13.5 343 3.0 5/8" Standard bearing	
13.5 343 3.5 5/8" Left and right hand version, s	standard 205 bearing
13.5 343 4.0 5/8" Standard bearing	
14 356 2.5 5/8" Standard bearing	
14 356 3.5 5/8" Standard bearing left and rigit	ht hand
14 356 3.5 5/8" Heavy duty bearing left and r	right hand, standard blade
15 381 3.0 5/8" Standard bearing	
15 381 3.5 3/4" Standard bearing. Heavy duty	y bearing with heavy duty hub
15 381 3.5 5/8" Standard bearing with plastic	c cap. Double row bearing with metal cap
15 381 4.0 5/8" Cast bearing housing with do	ouble row bearing
15 381 4.0 20mm Cast bearing housing with do	ouble row bearing
15 381 4.0 5/8" Single Row	
15.8 401 3.5 3/4" Heavy duty bearing with heav	vy duty hub
18 457 4.0 3/4" Lead and trailing disc	





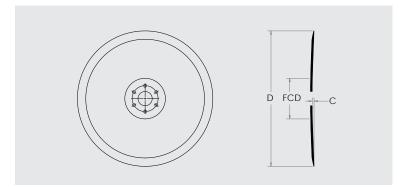
Planting and Seeding

PLAIN OPENERS AND COVERING DISC ASSEMBLIES

Slight concavity openers

Openers are manufactured to the requested concavity to achieve the optimum desired seedbed. Made with an exclusive alloy of boron steel, they offer unsurpassed performance in the field.





Plain Openers

Diam	eter	Thickness	Concav	/ity
inches	mm	mm	inches	mm
9	231	3.0	0.031	0.8
12	306	2.5/3.5	0.039	1.0
12.5	321	2.5/3.0/3.5	0.047	1.2
13	330	2.5/3.0	0.055	1.4
13.5	344	2.5/3.0/3.5/4.0	0.063	1.6
14	356	2.5/3.5/4.0/4.5/5.0	0.071	1.8
14	356	3.0	0.071	1.8
15	381	3.0/3.5/4.0/4.5	0.075	1.9
15.8	401	3.5	0.079	2.0
16	410	3.0/4.0	0.083	2.1
18	460	4.0	0.094	2.4

Covering Disc Assemblies

Diam	eter	Thickn	Fits	
Inches	mm	Inches	mm	Shaft
8	203	0.08	2.0	5/8″
8	203	0.1	2.5	5/8″
	•			



55



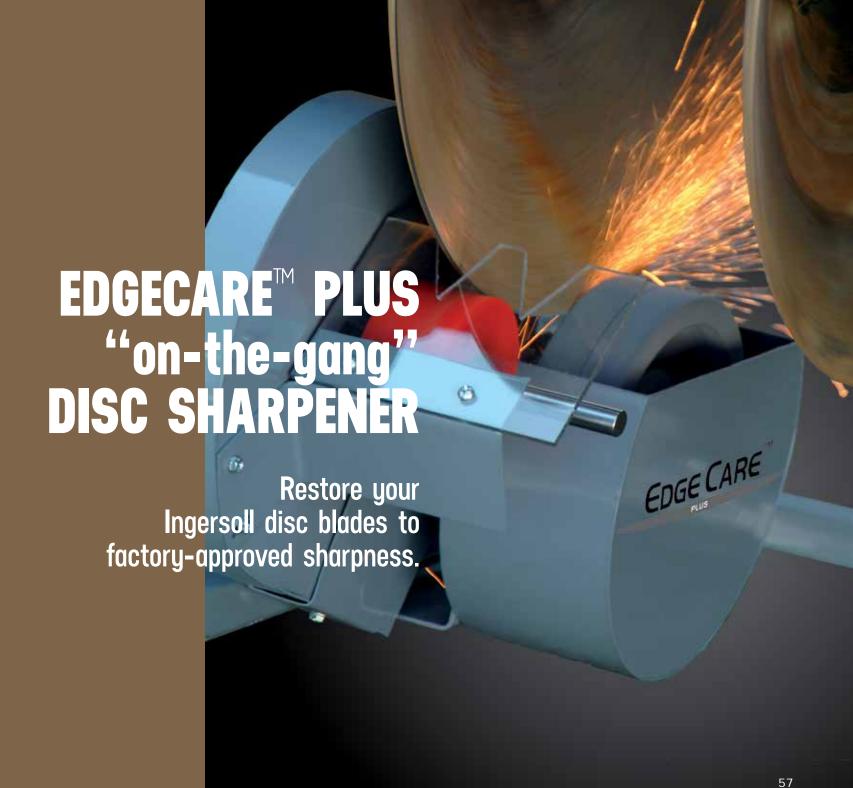
Tillage Maintenance

EDGECARE PLUS "on-the-gang" DISC SHARPENER

50% improved sharpening time

- Sharpen Ingersoll disc blades right on the gang, or individual hub mounted disc
- Simple design allows quick and easy setup
- Edge Care[™] Plus cold sharpening technology extends disc blade life
- Unique Edge Care Plus inside ground bevel profile does not reduce the diameter of the disc blade
- Edge Care Plus system insures that the disc maintains factory approved levels of hardness and ductility
- Average sharpening time is 2 to 3 minutes per disc (24" disc)
- Extra sharpening wheel included
- Made in USA







Conventional Tillage

SOILRIPPER TILLAGE POINTS

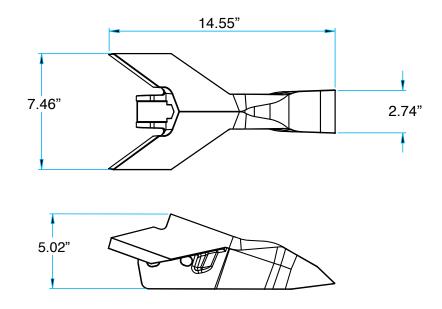
Extra high strength steel

Ingersoll's new SoilRipper[™] tillage points feature a robust design and superior fine grain chromium-carbide steel to withstand the most challenging soil conditions, providing the best overall value choice.

FEATURES

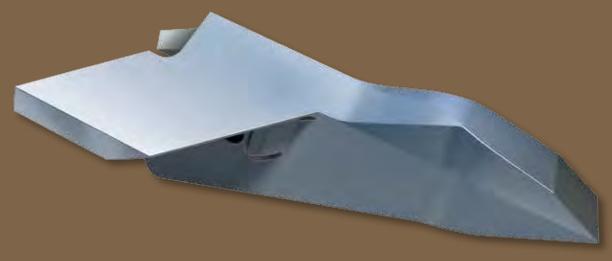
- Patented design
- More robust design with extra high strength steel for longer service life
- Wing and nose surface geometry generates maximum soil fracturing while reducing draft loads
- As they wear, SoilRipper points maintain their ability to penetrate the toughest soil conditions
- Wear feature protects mounting hardware
- Ideal for high speed compaction-busting tillage applications





SPECIFICATIONS

- Solid one-piece cast for extreme durability with super hard steel
- Formed from fine grain chromium-carbide steel
- Rockwell harness score of 48-50 Rc
- 7.5" winged SoilRipper point designed for a 1.25" shank width
- 24 lbs.
- Designed to fit Case IH, DMI, Krause and John Deere equipment



SOILRIPPER™ TILLAGE POINTS

Maximum soil fracturing with reduced draft load

58



Plain Concave, Rollable Boron and DuraFace™

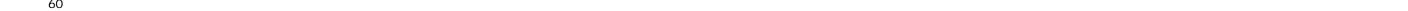
Certain sizes are available without a center hole. Contact Customer Service.

ITG Hole Pattern	Hole Pattern Order Number	Spec	Fits Axle Type	Fi	ts Axle Sizes	
	10	DS1	Square or Round	7/8" Square	1" Square	1" Round
	11	DS2	Square or Round	1" Square	1-1/8" Square	1-1/8" Round
	12	DS3	Square or Round	1-1/8" Square	1-1/4" Square	1-1/4" Round
	13	DS9	Square or Round	1-1/4" Square	1-1/2" Square	1-1/2" Round
<u> </u>	14	DS4	Square or Round	1-1/2" Square	1-3/4" Square	1-3/4" Round
	49	R51	Round	15/16" Round		
	15	R1	Round	1" Round		
	16	R2	Round	1-1/8" Round		
	17	R3	Round	1-1/4" Round		
	18	R4	Round	1-1/2" Round		
	19	R46	Round	1-3/4" Round		
	20	R5	Round	1-3/4" Round		
	21	R6	Round	2" Round		
	57	113	Round	2-3/16" Round		
	22	R6.5	Round	2-1/4" Round		
	23	R7	Round	2-1/2" Round		
	24	SQ1	Square	1" Square		
	25	SQ1.5	Square	1-1/4" Square		
	26	SQ2	Square	2-3/8" Square		
			•	·		
	27	SR1	Square or Round	7/8" Square	1" Round	
	28	SR2	Square or Round	1" Square	1-1/8" Round	
	29	SR3	Square or Round	1-1/8" Square	1-1/4" Round	
	30	SR4	Square or Round	1-1/4" Square	1-1/2" Round	
	31	SR4.5	Square or Round	1-1/2" square	1-5/8" Round	
	32	SR5	Square or Round	1-1/2" Square	1-3/4" Round	
	33	SR6	Square or Round	1-3/4" Square	2" Round	
	34	SR7	Square or Round	2-1/4″ Square	2-1/2" Round	
			· ·	·		
	35	CL1	Square or Round	7/8" Square	7/8" Round	
	36	CL2	Square or Round	1" Square	1" Round	
	37	CL3	Square or Round	1-1/8" Square	1-1/8" Round	
	38	CL4	Square or Round	1-1/4" Square	1-1/4" Round	
	39	CL5	Square or Round	1-1/2" Square	1-1/2" Round	
	50	CL41	Square	1.58"/40mm Square	1 1/2 1100110	
	40	CL6	Square or Round	1-3/4" Square	1-3/4" Round	
	41	CL7 / CL59	Square or Round	2-1/4" Square	2-1/4" Round	
	71	327 / 323	Square or Rouria	2 1/4 Square	2 17 TOUTIO	

GET THE EDGE



		Hole Config	jurations							
Hole	Cluster Hole	Used on	Chana	Center F	Hole	Bolt Ci	rcle Dia.	Bolt	Bolt Ho	le Dia.
Configuration	Order No.	Used on	Shape	Inches	MM	Inches	MM	Holes	Inches	MM
	51	IH older style, others	Rectangle	0.949 x 1.29	23.6 x 32.8	3.25	82.6	6	0.34	8.7
	52	CNH	Round	1.50	38.1	4.50	114.3	4	0.53	13.5
	57	BushHog, Kelly, Pearman	Round	2.53	64.3	3.63	92.2	4	0.41	10.3
	59	Kongskilde, Martin	Round	3.00	76.2	4.00	101.6	4	0.41	10.3
	62	Agco	Round	3.17	80.5	4.75	120.7	4	0.47	12.0
•••	69	K-Hart, Kinze, Kuhn-Krause, PCR Rydal Salford, Whalen, Wilcox, Yetter	Round	3.99	101.3	5.25	133.3	4	0.53	13.5
	74	CNH	Round	1.50	38.1	4.00	101.6	4	0.61	15.4
	76	CNH	Round	2.68	68.0	4.25	108.0	4	0.53	13.5
	78	Landoll, Mandako, Morris, Sunflower Tebben, Thurston, Unverferth, Wilrich, Yetter, Amako	Round	3.66	92.9	5.00	127.0	4	0.53	13.5
	80	Komia, Needham	Round	3.03	77.0	4.41	10.3	4	0.41	10.3
	81	Agco, CNH, Harriston, Regier, Sunflower	Round	2.50	63.5	4.00	101.6	4	0.53	13.5
	84		Round	2.70	68.3	4.25	108.0	4	0.41	10.3
	86	Agco, Bourgault	Round	3.64	92.5	5.00	127.0	4	0.70	17.9
	87	Argis, CNH, Needham	Round	3.41	86.6	4.42	112.3	4	0.53	13.5
	119	Affordable, Agco, Amity, Bourgault, CNH, Crustbuster	Round	3.64	92.5	5.00	127.0	4	0.56	14.3
		DSI, Kelly, Key Adventures ,Wilrich	Round							
	121	Agco	Round	3.50	88.9	5.00	127.0	4	0.56	14.3
	122	CNH, Kongskilde	Round	3.19	81.0	1.19	106.5	4	0.42	10.7
	125	Agco, Salford	Round	3.97	100.8	5.25	133.3	4	0.53	13.5
	58	Agco, Crustbuster	Round	1.37	34.9	3.00	76.2	5	0.33	8.3
Ö.	63	Agco, Amaco, Argis, Brillion, CNH, Disc Pro ETS, Kuhn-Krause, Promachine, Salford, Schulte, Sunflower, Wilcox	Round	4.10	104.1	5.50	139.7	5	0.53	13.5
	79	Amaco, Great Plains, Power Farming	Round	2.40	61.0	4.45	113.0	5	0.51	13.0
	88	CNH, Kearney	Round	2.56	65.1	3.54	90.0	5	0.36	9.1
	91	Amity, Crustbuster, H&S	Round	1.37	34.9	3.00	76.2	5	0.33	8.3
	109	Alamo, Argis, Kearney	Round	2.14	54.4	4.72	13.1	5	0.52	13.1
	114	CNH	Round	4.08	103.6	5.50	139.7	5	0.53	13.5
	53	Agco, Alamo, Argis, CNH, Kinze	Round	2.02	51.2	3.50	89.0	6	0.41	10.3
	55	Argis, CNH, SMA, Til-Tech, Unverferth	Round	3.77	95.7	5.00	127.0	6	0.41	10.3
	60	K-Hart	Round	1.92	48.8	4.31	109.5	6	0.33	8.3
	61	Truax	Round	1.44	36.5	3.13	79.4	6	0.27	6.8
• •	64	South American Product	Round	1.58	40.0	3.78	96.0	6	0.28	7.0
	66	South American Product	Round	2.44	62.0	3.62	92.0	6	0.43	11.0
	67	South American Product	Round	2.68	68.0	4.14	105.0	6	0.34	8.6
	68	South American Product	Round	2.95	75.0	4.53	115.0	6	0.35	9.0
	70	South American Product	Round	2.95	75.0	4.53	115.0	6	0.41	10.5
	71	South American Product	Round	3.15	80.0	4.53	115.0	6	0.34	8.6



Hole Configurations

Hole	Cluster Hole		CI	Center	- Hole	Bolt C	ircle Dia.	Bolt	Bolt Hol	le Dia.
Configuration	Order No.	Used on	Shape	Inches	MM	Inches	MM	Holes	Inches	MM
	72	South American Product	Round	3.15	80.0	4.53	115.0	6	0.43	11.0
	73	South American Product	Round	4.84	123.0	6.02	153.0	6	0.34	8.6
	77	CNH, Hiniker	Round	1.73	43.9	2.50	63.5	6	0.27	6.8
	82	Kelly	Round	1.77	45.0	2.85	73.0	6	0.10	23.0
	83	Agco, Agri-Phyto, CNH, Crustbuster	Round	2.03	51.5	3.38	85.8	6	0.41	10.3
	90	Agco, CNH, Landoll, Salford	Round	1.50	38.1	3.00	76.2	6	0.37	9.5
	92	Duratech	Round	1.48	37.7	5.00	127.0	6	0.55	13.9
	93	Agco, CNH, Stroble	Round	1.93	49.0	2.87	71.8	6	0.33	8.3
	94	Agco, Amaco	Round	1.60	40.6	3.50	89.0	6	0.34	8.7
	96	Kuhn-Krause, Schaffert	Round	1.76	44.8	3.00	76.2	6	0.34	8.7
	97	Agco, Amaco, Artsway, Bourgault, CNH, Groff, Kearney, Kinze, Landoll, Yetter	Round	1.19	30.2	2.88	73.0	6	0.27	6.8
	98	Agco, Argis, Duratech, Kelly, Kinze, Kuhn-Krause Monosem, Precision Planting, Sustain Ag	Round	1.58	40.1	2.88	73.0	6	0.27	6.8
	99	Bourgault, CNH	Round	1.16	29.4	2.68	68.0	6	0.28	7.1
	100	CNH, Strobel	Round	1.16	29.4	2.50	63.5	6	0.27	6.8
	101	Burch	Round	2.08	52.8	2.97	75.4	6	0.34	8.7
	102	Kuhn-Krause	Round	1.58	40.1	2.78	69.8	6	0.22	5.6
	103	Agco	Round	1.56	39.7	2.78	69.8	6	0.24	6.0
	104	Agco, Kuhn- Krause	Round	1.77	44.9	3.00	76.2	6	0.28	7.1
	105	Agco	Round	1.63	41.3	2.50	63.5	6	0.27	6.8
	106	Becknell, CNH, Morris	Round	1.39	35.3	2.50	63.5	6		
	107	Agco, Amity, CNH, Ditch Witch, Kuhn-Krause	Round	1.50	38.1	3.00	76.2	6	0.27	6.8
	108	Rain Flo	Round	1.50	38.1	4.25	108.0	6	0.41	10.3
	110	Noresman	Round	1.50	38.0	3.78	95.9	6	0.51	13.0
	118	Sustain Ag	Round	2.95	75.0	2.95	104.8	6	0.51	13.0
	124	Argis, Reiger, Unverferth	Round	3.81	96.7	5.00	127.0	6	0.41	10.3
	127	Agco, Monosem	Round	1.25	31.8	3.25	82.6	6	0.27	6.8
	129	CNH	Round	1.39	35.2	2.50	63.5	6	0.27	6.8
	130	Amity, Argis, Bourgault, BSB, CNH, Ditch Witch, Salford	Round	1.58	40.0	2.87	73.0	6	0.28	7.1
	131	Amity, CNH, Salford	Round	1.58	40.2	2.87	73.0	6	0.35	8.8
	132	CNH, Salford, Seedhawk	Round	1.58	40.0	3.00	76.2	6	0.34	8.5
Round center hole with 4	54	Ag Synergy, Yetter	Round	3.97	100.8	5.25	133.4	4 Square Holes	0.53	13.5
square bolt holes	56	CNH, Unverferth	Round	1.78	45.2	5.00	127.0	4 Square Holes	0.53	13.5
	75	CNH, DSI	Round	2.50	63.5	5.00	127.04	4 Square Holes	0.53	13.5

Hole Configurations

			iioio comigaratioi		0 1		D 11 01	1 51		D 11 11	- D:
Hole		Cluster Hole	Used on	Shape	Center	Hole	Bolt Circ	ie Dia.	Bolt	Bolt Ho	le Dia.
Configuration		Order No.		oapo	Inches	MM	Inches	MM	Holes	Inches	MM
Round Center hole with 6 square bolt holes		65	South American Product	Round	1.97	50.0	3.78	96.0	6 Square Holes	0.28	7.0
Round Center hole with 2 rings of 5 Rd. blt. holes		85	Agco, Agri-Phyto, CNH, Crustbuster	Round	1.38	35.0	3.25 5.00	82.6 127.0	5 Round holes	0.33	8.3
	•								Round holes		
Round Center hole with 4 oval bolt holes		89	Argis, CNH	Round	3.97	100.8	5.00	127.0	4 Oval Holes	0.53	13.5
	• • •						5.25	133.3		0.66	16.7
Round Center hole with 2 rings 4&1Rd. bolt holes	• • •	95	CNH,Yetter	Round	1.75	44.5	3.25	82.6	4 Round Holes	0.34	8.7
							3.00	76.2	1 Round Hole	0.28	7.1
Notched Round Center with 4 round bolt holes	· •	115	Sustain Ag	Round	2.78	70.5	3.74	95.0	4 Round Holes	0.45	11.5
Round Center hole with 2 rings 6 & 4 blt.holes		128	Amaco	Round	1.69	42.9	3.13	79.5	6 Round Holes	0.27	6.8
							4.50	114.3	4 Square Holes	0.34	8.7
Round Center hole with 2 rings 6 & 2 blt.holes	- : • :-	133	Agco	Round	1.58	40.0	2.75	69.8	6 Round Holes	0.22	5.6
	•						4.50	114.4	2 Square Holes	0.34	8.7
No Center hole 4 Round bolt holes	• •	116	Norwood	None	None	None	3.86	98.0	4 Round Holes	0.52	13.2

63



Ingersoll Worksheet

Special projects request guide

Special orders are available through your authorized Ingersoll Sales Representative. The worksheets on these pages are provided for your convenience in specifying the products you need.

INGERSOLL

Full Concavity Discs	Inches	mm
Diameter (D)		
Center Hole Diameter (CHD)		
Thickness (T)		
Number of Notches (NN)		
Concavity (C)		
Concavity Radius (CR)		
Edge Profile		

Marker or Flat Back Disc	Inches	mm
Diameter (D)		
Center Hole Diameter (CHD)		
Thickness (T)		
Number of Notches (NN)		
Concavity (C)		
Concavity Radius (CR)		
Bolt Circle Diameter (BCD)		
Number of Holes (NH)		
Bolt Hole Diameter (BHD)		
Flat Center Diameter (FCD)		
Edge Profile		

Ingersoll Worksheet

Special projects request guide

Special orders are available through your authorized Ingersoll Sales Representative. The worksheets on these pages are provided for your convenience in specifying the products you need.

Opener or Flat Coulter	Inches	mm
Diameter (D)		
Center Hole Diameter (CHD)		
Thickness (T)		
Number of Notches (NN)		
Concavity (C)		
Bolt Circle Diameter (BCD)		
Number of Holes (NH)		
Bolt Hole Diameter (BHD)		
Edge Profile		

Fluted or Rippled Coulter	Inches	mm
Diameter (D)		
Center Hole Diameter (CHD)		
Thickness (T)		
Bolt Circle Diameter (BCD)		
Number of Holes (NH)		
Bolt Hole Diameter (BHD)		
Flute / Wave Height (FH)		
Number of Flutes (NF)		
Edge Profile		





www.IngersollTillage.com
(888) 768-1740
sales@IngersollTillage.com

Ingersoll Tillage Group 460 Sherman Ave N Hamilton, Ontario L8L 8J6, Canada

ISO 9001:2008 Certified